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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,570	11/19/2001	Manfred Bartz	CYPR-CD01167M	1199
7590 01/26/2005			EXAMINER	
WAGNER, MURABITO & HAO LLP TWO NORTH MARKET STREET, THIRD FLOOR SAN JOSE, CA 95113			DIMYAN, MAGID Y	
			ART UNIT	PAPER NUMBER
			2825	

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/989,570

**Applicant(s)**

BARTZ ET AL.

**Examiner**

Magid Y Dimyan

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 27-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 27-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/25/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 25 October 2004 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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3. Claims 1, 3, 4, 5, 6, 7, 8, 9, 27, 28, 30, 31, 32, 34 and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,817,005 to Mason et al. (hereinafter, "Mason").

4. With reference to claim 1, Mason teaches a method and system of facilitating a circuit design to be implemented in a programmable device (see Abstract; col. 1, ll. 13 – 35) comprising: (a) causing to be displayed information related to a module of a plurality of available modules, the module representing a function implementable in programmable resources available, the display performed in response to the module being selected (see col. 7, ll. 1 – 40; col. 8, ll. 45 – 55); (b) a computer program determining a valid position of module in a graphical interface, the graphical interface having a plurality of resource icons representing programmable resources, and valid positions based on characteristics of the module and characteristics of programmable resources, and the determination is made in response to user request for valid position (see col. 5, ll. 45 – 53; col. 7, ll. 5 – 57; Fig. 1A; col. 8, line 46 – col. 9, line 30. Icons are well known in the art, and are often used in a graphical user interface environment); and (c) providing in resource icons an indication of valid position of the module generated by a computer program (see also Fig. 1E; col. 11, line 66 to col. 12, line 33). Thus, Mason cites all the claimed elements.

5. As per claims 3 - 6, see (4) above, as well as col. 23, ll. 30 – 55, which disclose how a computer program can determine a valid position for a module in

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response to a user request for a new position, which can also be based on characteristics of the module and the resources, as claimed herein. Furthermore, see Fig. 1C; col. 10, ll. 30 – 41, which recite how “highlighting” is used in a graphical environment to facilitate floorplanning in an IC that includes available resources, as claimed.

6. Pursuant to claims 7 and 8, see (4) and (5) above, as well as col. 2, ll. 16 – 23; col. 5, line 45; col. 8, ll. 46 – 65; and col. 12, ll. 35 – 39, which collectively recite how the module and resource specifications (i.e., specifications obtained from published datasheets) are used to optimize an IC design that includes programmable resources and modules, as claimed.

7. As to claim 9, see above, as well as col. 5, ll. 52 – 53; col. 6, ll. 54 – 67; and col. 7, ll. 5 - 14, which show how schematics can be used to display a module, as claimed.

8. As per claim 27, see above, as well as col. 10, ll. 30 – 65, which teach how a resource icon can represent a valid position, as claimed.

9. Claims 28, 30, 31, 32 and 37 contain the same limitations as claims 1, 3, 4, 5 and 9, respectively, and thus the same rejections also apply.

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10. Referring to claim 34, see above, as well as col. 8, line 22 – col. 9, line 40 which teach how modules selected based on a request are based on available modules, and also based on module characteristics, as claimed.

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 2, 10, 11, 12, 14 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mason in view of Publication No. US 2002/0099863 to Comeau et al (hereinafter, "Comeau").

13. Referring to claims 2, 10, 11, 12 and 14, the teachings of Mason are cited above, and described in more detail in his disclosure. However, Mason does not disclose the use of an Application Programming Interface (API), or the use of an Interrupt Vector Table having a call to an interrupt service routine, as claimed herein. On the other hand, Comeau teaches an apparatus that supports processors executing interpreted language applications that use API (page 3, paragraph 0043), an interrupt vector table (page 3, paragraph 0035), and an interrupt service routine that may be tied to threads under control of the

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scheduler (page 4, paragraph 0049). See also Figs. 2, 4 and 5 for more details of these features claimed by Comeau. Furthermore, Comeau provides a motivation for incorporating these features in a design platform. As cited by Comeau in the Abstract and on page 1, paragraph 0014, using these features allows programming across various platforms (i.e., makes it independent of the processor platform), and thus eliminates the need for an operating system. This will obviously be very useful in an IC design that uses programmable resources and modules, as claimed. It would therefore be obvious to one having ordinary skill in the art at the time of the invention to combine the teachings of Mason and Comeau to obtain the same inventions as claimed herein.

14. Claim 29 has the same limitations as claim 2, and thus the same also rejections apply.

15. Claims 13, 15, 16, 33, 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mason in view of Comeau and further in view of Zizzo (U.S. Patent No. 6,578,174).

16. With reference to all these claims, the teachings of Mason and Comeau are recited above, and described in more detail in their disclosures. However, neither invention refers to the use of XML descriptions of modules, or HTML datasheets of the modules, as claimed herein. Both XML and HTML are well known in the art, as are cited by Zizzo (see column 7, lines 47 – 52; column 9,

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lines 20 – 30). As also stated by Zizzo, both these languages are particularly useful for transmitting information over the Internet, and this provides a motivation for combining all three inventions. It would therefore be obvious to one having ordinary skill in the art to obtain the same inventions as claimed by combining all three inventions.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Magid Y Dimyan whose telephone number is (571) 272-1889. The examiner can normally be reached on Monday - Friday 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S Smith can be reached on (571) 272-1907. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

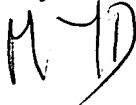


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Magid Y Dimyan  
Examiner  
Art Unit 2825

myd  
14 January 2005



VUTHE SIEK  
PRIMARY EXAMINER